

**Human Lung Carcinoma Cells (A549) Expressing Human Angiotensin-Converting Enzyme 2 (HA-FLAG)**

**Catalog No. NR-53522**

**Product Description:**

NR-53522 contains a preparation of human (*Homo sapiens*) lung carcinoma epithelial cells (A549) expressing human angiotensin-converting enzyme 2 (ACE2) with C-terminal HA-tag and FLAG-tag. A549-hACE2 (HA-FLAG) cells were created by transducing A549 cells with lentiviral vector pLVX-Puro (Clontech™) expressing human ACE2 under the control of human cytomegalovirus immediate early promoter. pLVX-Puro contains a puromycin resistance gene for maintenance of stable transductants.

**Lot: 70036313**

**Manufacturing Date: 15JUN2020**

TEST	SPECIFICATIONS	RESULTS
<b>Growth Properties</b>	Adherent	Adherent
<b>Morphology</b>	Epithelial	Epithelial
<b>Confirmation of ACE2 Expression by Immunofluorescence Assay (IFA)<sup>1</sup></b>	Fluorescence observed	Fluorescence observed (Figure 1)
<b>Confirmation of HA-Tag Expression by IFA<sup>2</sup></b>	Fluorescence observed	Fluorescence observed (Figure 2)
<b>Confirmation of FLAG-Tag Expression by IFA<sup>3</sup></b>	Fluorescence observed	Fluorescence observed (Figure 3)
<b>Multiplex PCR Amplification of Cytochrome C Oxidase I (COI) Gene</b>	Human origin No evidence of another species	Human origin No evidence of another species
<b>Total Cell Count</b>	> 1.0 × 10 <sup>6</sup> cells per vial	3.5 × 10 <sup>6</sup> cells per vial
<b>Post-Freeze Viability</b>	≥ 50%	90.3%
<b>Sterility (21-day incubation)</b> Harpo's HTYE broth, 37°C and 26°C, aerobic <sup>4</sup> Trypticase Soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C, aerobic	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
<b>Mycoplasma Contamination</b> Hoechst DNA stain Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected None detected	None detected None detected None detected

<sup>1</sup>Using ACE2 mouse monoclonal antibody (Proteintech®, 66699-1-Ig)

<sup>2</sup>Using HA Tag mouse monoclonal antibody (2-2.2.14), DyLight® 488 (Invitrogen™, 26183-D488)

<sup>3</sup>Using DYKDDDDK Tag mouse monoclonal antibody (FG4R), DyLight® 488 (Invitrogen™, MA1-91878-D488)

<sup>4</sup>Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

Figure 1: IFA for Confirmation of ACE2 Expression

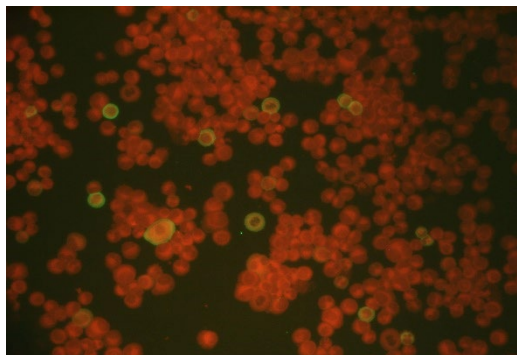


Figure 2: IFA for Confirmation of HA-Tag Expression

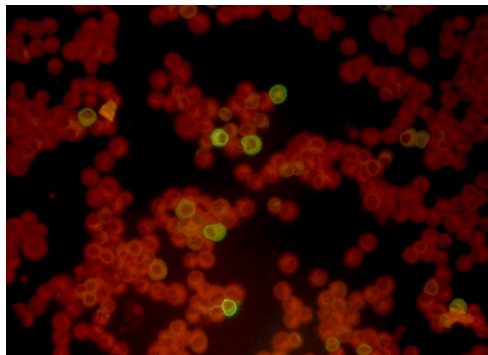
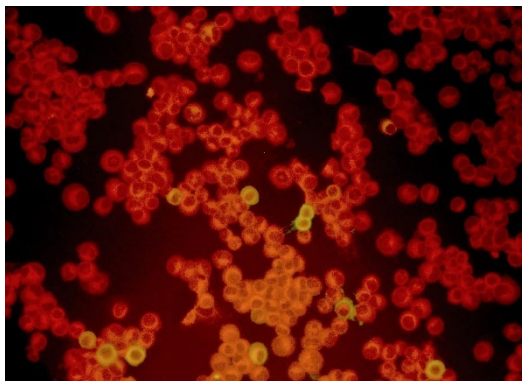


Figure 3: IFA for Confirmation of FLAG-Tag Expression



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12 APR 2021

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